

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/643,627B
Source: IPWS16
Date Processed by STIC: 3/17/06

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 03/17/2006

PATENT APPLICATION: US/10/643,627B

TIME: 14:05:52

Input Set : D:\10-643627 sequence ID currently amended.txt

Output Set: N:\CRF4\03172006\J643627B.raw

3 <110> APPLICANT: Sundelin, Johan
 4 Scarborough, Robert M.
 6 <120> TITLE OF INVENTION: Recombinant C140 Receptor, Its Agonists and Antagonists, and
 7 Nucleic Acids Encoding the Receptor
 9 <130> FILE REFERENCE: 44481-5006-09-US
 11 <140> CURRENT APPLICATION NUMBER: US 10/643,627B
 12 <141> CURRENT FILING DATE: 2003-08-19
 14 <150> PRIOR APPLICATION NUMBER: US 10/127,691
 15 <151> PRIOR FILING DATE: 2002-04-23
 17 <150> PRIOR APPLICATION NUMBER: US 08/097,938
 18 <151> PRIOR FILING DATE: 1993-07-26
 20 <150> PRIOR APPLICATION NUMBER: US 08/390,301
 21 <151> PRIOR FILING DATE: 1995-01-25
 23 <150> PRIOR APPLICATION NUMBER: US 08/474,414
 24 <151> PRIOR FILING DATE: 1995-06-07
 26 <160> NUMBER OF SEQ ID NOS: 64
 28 <170> SOFTWARE: PatentIn Ver. 2.1
 30 <210> SEQ ID NO: 1
 31 <211> LENGTH: 1475
 32 <212> TYPE: DNA
 33 <213> ORGANISM: Mus musculus
 35 <220> FEATURE:
 36 <221> NAME/KEY: CDS
 37 <222> LOCATION: (232)..(1416)
 38 <223> OTHER INFORMATION: C140 receptor, genomic DNA and deduced protein
 39 sequences
 41 <400> SEQUENCE: 1
 42 ccctgtcagt ctttaagattc tagaagtcgc tgtcctatac ggaacccaaa actctcactg 60
 44 ttaatgaaat accattgtcg gggcgaagat gtagctcagt ggtaaaatac ttgccagcac 120
 46 acacaagaat tagacttcaa ccgtcaccaa ctgccctgtg taggacggtc ggtcactgaa 180
 48 agagaatatt gtctgcaata ctctaatac atctgtctgt gttcatctga a atg ttc 237
 49 Met Phe
 50 1
 52 cat tta aaa cac agc agc ctt act gtt gga cca ttt atc tca gta atg 285
 53 His Leu Lys His Ser Ser Leu Thr Val Gly Pro Phe Ile Ser Val Met
 54 5 10 15
 56 att ctg ctc cgc ttt ctt tgt aca gga cgc aac aac agt aaa gga aga 333
 57 Ile Leu Leu Arg Phe Leu Cys Thr Gly Arg Asn Asn Ser Lys Gly Arg
 58 20 25 30
 60 agt ctt att ggc aga tta gaa acc cag cct cca atc act ggg aaa ggg 381
 61 Ser Leu Ile Gly Arg Leu Glu Thr Gln Pro Pro Ile Thr Gly Lys Gly
 62 35 40 45 50
 64 gtt ccg gta gaa cca ggc ttt tcc atc gat gag ttc tct gcg tcc atc 429

(pg. 6)

RAW SEQUENCE LISTING

DATE: 03/17/2006

PATENT APPLICATION: US/10/643,627B

TIME: 14:05:52

Input Set : D:\10-643627 sequence ID currently amended.txt

Output Set: N:\CRF4\03172006\J643627B.raw

```

65 Val Pro Val Glu Pro Gly Phe Ser Ile Asp Glu Phe Ser Ala Ser Ile
66          55          60          65
68 ctc acc ggg aag ctg acc acg gtc ttt ctt ccg gtc gtc tac att att 477
69 Leu Thr Gly Lys Leu Thr Thr Val Phe Leu Pro Val Val Tyr Ile Ile
70          70          75          80
72 gtg ttt gtg att ggt ttg ccc agt aat ggc atg gcc ctc tgg atc ttc 525
73 Val Phe Val Ile Gly Leu Pro Ser Asn Gly Met Ala Leu Trp Ile Phe
74          85          90          95
76 ctt ttc cga acg aag aag aaa cac ccc gcc gtg att tac atg gcc aac 573
77 Leu Phe Arg Thr Lys Lys Lys His Pro Ala Val Ile Tyr Met Ala Asn
78 100          105          110
80 ctg gcc ttg gcc gac ctc ctc tct gtc atc tgg ttc ccc ctg aag atc 621
81 Leu Ala Leu Ala Asp Leu Leu Ser Val Ile Trp Phe Pro Leu Lys Ile
82 115          120          125          130
84 tcc tac cac cta cat ggc aac aac tgg gtc tac ggg gag gcc ctg tgc 669
85 Ser Tyr His Leu His Gly Asn Asn Trp Val Tyr Gly Glu Ala Leu Cys
86          135          140          145
88 aag gtg ctc att ggc ttt ttc tat ggt aac atg tat tgc tcc atc ctc 717
89 Lys Val Leu Ile Gly Phe Phe Tyr Gly Asn Met Tyr Cys Ser Ile Leu
90          150          155          160
92 ttc atg acc tgc ctc agc gtg cag agg tac tgg gtg atc gtg aac ccc 765
93 Phe Met Thr Cys Leu Ser Val Gln Arg Tyr Trp Val Ile Val Asn Pro
94          165          170          175
96 atg gga cac ccc agg aag aag gca aac atc gcc gtt ggc gtc tcc ttg 813
97 Met Gly His Pro Arg Lys Lys Ala Asn Ile Ala Val Gly Val Ser Leu
98          180          185          190
100 gca atc tgg ctc ctg att ttt ctg gtc acc atc cct ttg tat gtc atg 861
101 Ala Ile Trp Leu Leu Ile Phe Leu Val Thr Ile Pro Leu Tyr Val Met
102 195          200          205          210
104 aag cag acc atc tac att cca gca ttg aac atc acc acc tgt cac gat 909
105 Lys Gln Thr Ile Tyr Ile Pro Ala Leu Asn Ile Thr Thr Cys His Asp
106          215          220          225
108 gtg ctg cct gag gag gta ttg gtg ggg gac atg ttc aat tac ttc ctc 957
109 Val Leu Pro Glu Glu Val Leu Val Gly Asp Met Phe Asn Tyr Phe Leu
110          230          235          240
112 tca ctg gcc att gga gtc ttc ctg ttc ccg gcc ctc ctt act gca tct 1005
113 Ser Leu Ala Ile Gly Val Phe Leu Phe Pro Ala Leu Leu Thr Ala Ser
114          245          250          255
116 gcc tac gtg ctc atg atc aag acg ctc cgc tct tct gct atg gat gaa 1053
117 Ala Tyr Val Leu Met Ile Lys Thr Leu Arg Ser Ser Ala Met Asp Glu
118          260          265          270
120 cac tca gag aac aaa agg cag agg gct atc cga ctc atc atc acc gtg 1101
121 His Ser Glu Lys Lys Arg Gln Arg Ala Ile Arg Leu Ile Ile Thr Val
122 275          280          285          290
124 ctg gcc atg tac ttc atc tgc ttt gct cct agc aac ctt ctg ctc gta 1149
125 Leu Ala Met Tyr Phe Ile Cys Phe Ala Pro Ser Asn Leu Leu Val
126          295          300          305
128 gtg cat tat ttc cta atc aaa acc cag agg cag agc cac gtc tac gcc 1197
129 Val His Tyr Phe Leu Ile Lys Thr Gln Arg Gln Ser His Val Tyr Ala

```

RAW SEQUENCE LISTING

DATE: 03/17/2006

PATENT APPLICATION: US/10/643,627B

TIME: 14:05:52

Input Set : D:\10-643627 sequence ID currently amended.txt

Output Set: N:\CRF4\03172006\J643627B.raw

```

130          310          315          320
132   ctc tac ctt gtc gcc ctc tgc ctg tgc acc ctc aac agc tgc ata gac   1245
133   Leu Tyr Leu Val Ala Leu Cys Leu Ser Thr Leu Asn Ser Cys Ile Asp
134          325          330          335
136   ccc ttt gtc tat tac ttt gtc tca aaa gat ttc agg gat cac gcc aga   1293
137   Pro Phe Val Tyr Tyr Phe Val Ser Lys Asp Phe Arg Asp His Ala Arg
138          340          345          350
140   aac gcg ctc ctc tgc cga agt gtc cgc act gtg aat cgc atg caa atc   1341
141   Asn Ala Leu Leu Cys Arg Ser Val Arg Thr Val Asn Arg Met Gln Ile
142   355          360          365          370
144   tcg ctc agc tcc aac aag ttc tcc agg aag tcc ggc tcc tac tct tca   1389
145   Ser Leu Ser Ser Asn Lys Phe Ser Arg Lys Ser Gly Ser Tyr Ser Ser
146          375          380          385
148   agc tca acc agt gtt aaa acc tcc tac tgagctgtac ctgaggatgt   1436
149   Ser Ser Thr Ser Val Lys Thr Ser Tyr
150          390          395
152   caagcctgct tgatgatgat gatgatgatg gtgtgtgtg   1475
155 <210> SEQ ID NO: 2
156 <211> LENGTH: 395
157 <212> TYPE: PRT
158 <213> ORGANISM: Mus musculus
160 <400> SEQUENCE: 2
161   Met Phe His Leu Lys His Ser Ser Leu Thr Val Gly Pro Phe Ile Ser
162       1          5          10          15
164   Val Met Ile Leu Leu Arg Phe Leu Cys Thr Gly Arg Asn Asn Ser Lys
165          20          25          30
167   Gly Arg Ser Leu Ile Gly Arg Leu Glu Thr Gln Pro Pro Ile Thr Gly
168          35          40          45
170   Lys Gly Val Pro Val Glu Pro Gly Phe Ser Ile Asp Glu Phe Ser Ala
171          50          55          60
173   Ser Ile Leu Thr Gly Lys Leu Thr Thr Val Phe Leu Pro Val Val Tyr
174          65          70          75          80
176   Ile Ile Val Phe Val Ile Gly Leu Pro Ser Asn Gly Met Ala Leu Trp
177          85          90          95
179   Ile Phe Leu Phe Arg Thr Lys Lys Lys His Pro Ala Val Ile Tyr Met
180          100          105          110
182   Ala Asn Leu Ala Leu Ala Asp Leu Leu Ser Val Ile Trp Phe Pro Leu
183          115          120          125
185   Lys Ile Ser Tyr His Leu His Gly Asn Asn Trp Val Tyr Gly Glu Ala
186          130          135          140
188   Leu Cys Lys Val Leu Ile Gly Phe Phe Tyr Gly Asn Met Tyr Cys Ser
189          145          150          155          160
191   Ile Leu Phe Met Thr Cys Leu Ser Val Gln Arg Tyr Trp Val Ile Val
192          165          170          175
194   Asn Pro Met Gly His Pro Arg Lys Lys Ala Asn Ile Ala Val Gly Val
195          180          185          190
197   Ser Leu Ala Ile Trp Leu Leu Ile Phe Leu Val Thr Ile Pro Leu Tyr
198          195          200          205
200   Val Met Lys Gln Thr Ile Tyr Ile Pro Ala Leu Asn Ile Thr Thr Cys

```

RAW SEQUENCE LISTING

DATE: 03/17/2006

PATENT APPLICATION: US/10/643,627B

TIME: 14:05:52

Input Set : D:\10-643627 sequence ID currently amended.txt

Output Set: N:\CRF4\03172006\J643627B.raw

```

201      210      215      220
203  His Asp Val Leu Pro Glu Glu Val Leu Val Gly Asp Met Phe Asn Tyr
204  225      230      235      240
206  Phe Leu Ser Leu Ala Ile Gly Val Phe Leu Phe Pro Ala Leu Leu Thr
207      245      250      255
209  Ala Ser Ala Tyr Val Leu Met Ile Lys Thr Leu Arg Ser Ser Ala Met
210      260      265      270
212  Asp Glu His Ser Glu Lys Lys Arg Gln Arg Ala Ile Arg Leu Ile Ile
213      275      280      285
215  Thr Val Leu Ala Met Tyr Phe Ile Cys Phe Ala Pro Ser Asn Leu Leu
216      290      295      300
218  Leu Val Val His Tyr Phe Leu Ile Lys Thr Gln Arg Gln Ser His Val
219  305      310      315      320
221  Tyr Ala Leu Tyr Leu Val Ala Leu Cys Leu Ser Thr Leu Asn Ser Cys
222      325      330      335
224  Ile Asp Pro Phe Val Tyr Tyr Phe Val Ser Lys Asp Phe Arg Asp His
225      340      345      350
227  Ala Arg Asn Ala Leu Leu Cys Arg Ser Val Arg Thr Val Asn Arg Met
228      355      360      365
230  Gln Ile Ser Leu Ser Ser Asn Lys Phe Ser Arg Lys Ser Gly Ser Tyr
231      370      375      380
233  Ser Ser Ser Ser Thr Ser Val Lys Thr Ser Tyr
234  385      390      395
238 <210> SEQ ID NO: 3
239 <211> LENGTH: 1255
240 <212> TYPE: DNA
241 <213> ORGANISM: Homo sapiens
243 <220> FEATURE:
244 <221> NAME/KEY: CDS
245 <222> LOCATION: (56)..(1249)
246 <223> OTHER INFORMATION: C140 receptor, genomic DNA and deduced protein
247 sequences
249 <400> SEQUENCE: 3
250  cgctccaggc ctgggtgaca gcgagaccct gtctcataaa ttaaaaaatg aataa atg 58
251                                     Met
252                                     1
254  aat gta ctt tca ttt gaa caa acc agt gtt act gct gaa aca ttt att 106
255  Asn Val Leu Ser Phe Glu Gln Thr Ser Val Thr Ala Glu Thr Phe Ile
256      5      10      15
258  tct gta atg acc ctt gtc ttc ctt tct tgt aca gga acc aat aga tcc 154
259  Ser Val Met Thr Leu Val Phe Leu Ser Cys Thr Gly Thr Asn Arg Ser
260      20      25      30
262  tct aaa gga aga agc ctt att ggt aag gtt gat ggc aca tcc cac gtc 202
263  Ser Lys Gly Arg Ser Leu Ile Gly Lys Val Asp Gly Thr Ser His Val
264      35      40      45
266  act gga aaa gga gtt aca gtt gaa aca gtc ttt tct gtg gat gag ttt 250
267  Thr Gly Lys Gly Val Thr Val Glu Thr Val Phe Ser Val Asp Glu Phe
268      50      55      60      65
270  tct gca tct gtc ctc act gga aaa ctg acc act gtc ttc ctt cca att 298

```

RAW SEQUENCE LISTING

DATE: 03/17/2006

PATENT APPLICATION: US/10/643,627B

TIME: 14:05:52

Input Set : D:\10-643627 sequence ID currently amended.txt

Output Set: N:\CRF4\03172006\J643627B.raw

271	Ser	Ala	Ser	Val	Leu	Thr	Gly	Lys	Leu	Thr	Thr	Val	Phe	Leu	Pro	Ile	
272					70					75					80		
274	gtc	tac	aca	att	gtg	ttt	gtg	gtg	ggg	ttg	cca	agt	aac	ggc	atg	gcc	346
275	Val	Tyr	Thr	Ile	Val	Phe	Val	Val	Gly	Leu	Pro	Ser	Asn	Gly	Met	Ala	
276					85				90					95			
278	ctg	tgg	gtc	ttt	ctt	ttc	cga	act	aag	aag	aag	cac	cct	gct	gtg	att	394
279	Leu	Trp	Val	Phe	Leu	Phe	Arg	Thr	Lys	Lys	Lys	His	Pro	Ala	Val	Ile	
280					100				105					110			
282	tac	atg	gcc	aat	ctg	gcc	ttg	gct	gac	ctc	ctc	tct	gtc	atc	tgg	ttc	442
283	Tyr	Met	Ala	Asn	Leu	Ala	Leu	Ala	Asp	Leu	Leu	Ser	Val	Ile	Trp	Phe	
284					115				120					125			
286	ccc	ttg	aag	att	gcc	tat	cac	ata	cat	ggc	aac	aac	tgg	att	tat	ggg	490
287	Pro	Leu	Lys	Ile	Ala	Tyr	His	Ile	His	Gly	Asn	Asn	Trp	Ile	Tyr	Gly	
288					130				135					140		145	
290	gaa	gct	ctt	tgt	aat	gtg	ctt	att	ggc	ttt	ttc	tat	ggc	aac	atg	tac	538
291	Glu	Ala	Leu	Cys	Asn	Val	Leu	Ile	Gly	Phe	Phe	Tyr	Gly	Asn	Met	Tyr	
292					150				155					160			
294	tgt	tcc	att	ctc	ttc	atg	acc	tgc	ctc	agt	gtg	cag	agg	tat	tgg	gtc	586
295	Cys	Ser	Ile	Leu	Phe	Met	Thr	Cys	Leu	Ser	Val	Gln	Arg	Tyr	Trp	Val	
296					165				170					175			
298	atc	gtg	aac	ccc	atg	ggg	cac	tcc	agg	aag	aag	gca	aac	att	gcc	att	634
299	Ile	Val	Asn	Pro	Met	Gly	His	Ser	Arg	Lys	Lys	Ala	Asn	Ile	Ala	Ile	
300					180				185					190			
302	ggc	atc	tcc	ctg	gca	ata	tgg	ctg	ctg	att	ctg	ctg	gtc	acc	atc	cct	682
303	Gly	Ile	Ser	Leu	Ala	Ile	Trp	Leu	Leu	Ile	Leu	Leu	Val	Thr	Ile	Pro	
304					195				200					205			
306	ttg	tat	gtc	gtg	aag	cag	acc	atc	ttc	att	cct	gcc	ctg	aac	atc	acg	730
307	Leu	Tyr	Val	Val	Lys	Gln	Thr	Ile	Phe	Ile	Pro	Ala	Leu	Asn	Ile	Thr	
308					210				215					220		225	
310	acc	tgt	cat	gat	gtt	ttg	cct	gag	cag	ctc	ttg	gtg	gga	gac	atg	ttc	778
311	Thr	Cys	His	Asp	Val	Leu	Pro	Glu	Gln	Leu	Leu	Val	Gly	Asp	Met	Phe	
312					230				235					240			
314	aat	tac	ttc	ctc	tct	ctg	gcc	att	ggg	gtc	ttt	ctg	ttc	cca	gcc	ttc	826
315	Asn	Tyr	Phe	Leu	Ser	Leu	Ala	Ile	Gly	Val	Phe	Leu	Phe	Pro	Ala	Phe	
316					245				250					255			
318	ctc	aca	gcc	tct	gcc	tat	gtg	ctg	atg	atc	aga	atg	ctg	cga	tct	tct	874
319	Leu	Thr	Ala	Ser	Ala	Tyr	Val	Leu	Met	Ile	Arg	Met	Leu	Arg	Ser	Ser	
320					260				265					270			
322	gcc	atg	gat	gaa	aac	tca	gag	aag	aaa	agg	aag	agg	gcc	atc	aaa	ctc	922
323	Ala	Met	Asp	Glu	Asn	Ser	Glu	Lys	Lys	Arg	Lys	Arg	Ala	Ile	Lys	Leu	
324					275				280					285			
326	att	gtc	act	gtc	ctg	gcc	atg	tac	ctg	atc	tgc	ttc	act	cct	agt	aac	970
327	Ile	Val	Thr	Val	Leu	Ala	Met	Tyr	Leu	Ile	Cys	Phe	Thr	Pro	Ser	Asn	
328					290				295					300		305	
330	ctt	ctg	ctt	gtg	gtg	cat	tat	ttt	ctg	att	aag	agc	cag	ggc	cag	agc	1018
331	Leu	Leu	Leu	Val	Val	His	Tyr	Phe	Leu	Ile	Lys	Ser	Gln	Gly	Gln	Ser	
332					310				315					320			
334	cat	gtc	tat	gcc	ctg	tac	att	gta	gcc	ctc	tgc	ctc	tct	acc	ctt	aac	1066
335	His	Val	Tyr	Ala	Leu	Tyr	Ile	Val	Ala	Leu	Cys	Leu	Ser	Thr	Leu	Asn	

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/643,627B

DATE: 03/17/2006
TIME: 14:05:53

Input Set : D:\10-643627 sequence ID currently amended.txt
Output Set: N:\CRF4\03172006\J643627B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; Xaa Pos. 1
Seq#:10; Xaa Pos. 1
Seq#:11; Xaa Pos. 1,2
Seq#:12; Xaa Pos. 1,2
Seq#:13; Xaa Pos. 1
Seq#:14; Xaa Pos. 1
Seq#:15; Xaa Pos. 1
Seq#:16; Xaa Pos. 1
Seq#:17; Xaa Pos. 1
Seq#:18; Xaa Pos. 1
Seq#:50; Xaa Pos. 2
Seq#:51; Xaa Pos. 2
Seq#:52; Xaa Pos. 1
Seq#:53; Xaa Pos. 1
Seq#:56; Xaa Pos. 2
Seq#:57; Xaa Pos. 2
Seq#:58; Xaa Pos. 1
Seq#:59; Xaa Pos. 1

VERIFICATION SUMMARY

DATE: 03/17/2006

PATENT APPLICATION: US/10/643,627B

TIME: 14:05:53

Input Set : D:\10-643627 sequence ID currently amended.txt

Output Set: N:\CRF4\03172006\J643627B.raw

L:727 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:746 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:766 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:786 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:805 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:824 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:862 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:881 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:900 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:1358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0
L:1377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0
L:1397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0
L:1417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0
L:1464 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0
L:1483 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:0
L:1503 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:0
L:1523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:0